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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/720,447

Applicant(s)

CHENG ET AL.

Examiner

EDWARD ZEE

Art Unit

2135

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This is in response to the amendments filed on February 20th, 2008. Claims 1-7 have been amended; Claim 20 has been added; Claims 1-20 are pending and have been considered below.

Claim Rejections - 35 USC § 101

2. The amendments filed on February 20th, 2008 have been considered and are effective at overcoming the previous rejections. Therefore, the rejections to Claims 1-7 have been withdrawn.

Claim Rejections - 35 USC § 102

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. **Claims 1-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Wong et al. (6,578,037).**

Claims 1 and 8: Wong et al. discloses a method and computer-readable medium or propagated signal having embodied thereon a computer program configured to determine whether a user is permitted to access a business object when executing a software application of an enterprise information technology system, the medium or signal comprising one or more code segments configured to:

a. use a permission object(*ie. policy group attribute*) to determine whether a user associated with an entry in user information is permitted to access a data object associated with a data object type(*ie. objects 218 and 224*) [figure 2];

b. wherein the entry in the user information associates the user with a user affiliation, the permission object identifies:

i. a user affiliation(*ie. which policy group user is associated to*) to which the permission object applies [column 6, lines 3-9];

ii. a data object type(*ie. type of database record*) to which the permission object applies such that the data object type is associated with multiple attributes(*ie. salary range, job categories, etc.*) and each data object having the data object type is associated with the multiple attributes [column 6, lines 29-39];

iii. a permission attribute(*ie. salary range, job categories, etc.*) identifying one of the multiple attributes [column 6, lines 29-39];

iv. and a permission value(*ie. employee's salary, employee's job category, etc.*) for the permission attribute [column 6, lines 29-39];

c. and the user is permitted to access the data object when:

i. the user affiliation that is associated with the user is the same user affiliation as the user affiliation to which the permission object applies(*ie. users affiliated with the "Human Resources of Company A" policy group may access employee records of employees earning salaries below a threshold*) [column 6, lines 29-39];

ii. the data object type(*ie. only Company A's records*) of the data object is the same data object type as the data object type to which the permission object applies [column 6, lines 29-39];

iii. and a value(*ie. recorded salary of employee's record is within the range of accessible salaries*) of an attribute of the multiple attributes associated with the data object is consistent with the permission value of the permission attribute and the attribute corresponds to the permission attribute [column 6, lines 29-39].

Claim 13: Wong et al. discloses a computer system for determining whether a user is permitted to access a data object when executing a software application of an enterprise information technology system, the system comprising:

a. a data repository(*ie. database system 100*) for access control information for software having data objects, each data object [figure 1]:

i. being associated with a data object type(*ie. only Company A's records*) having multiple attributes(*ie. salary ranges, job categories, etc.*) [column 6, lines 29-39];

ii. having multiple attributes(*ie. salary range, job categories, etc.*) that are the same as the multiple attributes of the data object type to which the data object is associated [column 6, lines 29-39];

iii. and having a value associated(*ie. employee's salary, employee's job category, etc.*) with each attribute of the multiple attributes [column 6, lines 29-39];

b. the data repository including:

i. user information(*ie. context attribute values*) that associates a user affiliation with a user of the software application [column 7, lines 46-48];

ii. and permission information(*ie. Company A HR policy group*) having multiple permission objects(*ie. policies*), each permission object identifying a user affiliation(*ie. only users from Company A's HR department*) to which the permission object applies, a data object type(*ie. only Company A's employee records*) to which the permission object applies, a permission attribute(*ie. salary range*) identifying one of the multiple attributes, and a permission value(*ie. employee's salary*) for the permission attribute [column 6, lines 29-39];

c. and an executable software module that causes:

i. a comparison of a value of an attribute of the multiple attributes associated with a data object to which a user seeks to access such that the attribute corresponds to the permission attribute of a permission object with the permission value of the permission object(*ie. conditions that restrict results returned by a query, thereby restricting access to data*) [column 5, lines 49-50];

ii. and an indication that a user is permitted to access a data object when the value of the attribute associated with the data object is consistent with the permission value of the permission object(*ie. the function checks context value attributes that identify the user to determine whether the users is associated with company A*) [column 7, lines 41-45].

Claims 2, 9 and 14: Wong et al., discloses a medium or signal, method and system of claims 1, 8 and 13 and further discloses that the one or more code segments are further configured to permit the user to access the data object when the value of the attribute of one of the multiple attributes associated with the data object is the same as the permission value of the permission attribute(*ie.*

permit users in HR of Company A to access employee records of employees earning salaries below a threshold) [column 6, lines 29-39].

Claims 3, 10 and 15: Wong et al. discloses a medium or signal, method and system of claims 1, 8 and 13 and further discloses that the one or more code segments are further configured to permit the user to access the data object when the value of the attribute of one of the multiple attributes associated with the data object is the within a range specified(*ie. range of salaries below a threshold*) by the permission value of the permission attribute [column 6, lines 29-39].

Claims 4, 11 and 16: Wong et al. discloses a medium or signal, method and system of claims 1, 8 and 13 and further discloses that the one or more code segments are further configured to permit the user to access the data object when the value of the attribute of one of the multiple attributes associated with the data object is one of enumerated values(*ie. one of the particular job categories*) specified by the permission value of the permission attribute [column 6, lines 29-39].

Claims 5, 12 and 17: Wong et al. discloses a medium or signal, method and system of claims 1, 8 and 13 and further discloses that:

- a. the permission object identifies an attribute group(*ie. policy groups*) having one or more attributes of the multiple attributes associated with the data object type(*ie. default policy groups 150, 160 and 170*) [figure 1];
- b. and the one or more code segments are further configured to permit the user to access an attribute of the data object only when the attribute of the data object corresponds to an attribute of the attribute group of the permission object(*ie. permit users in HR of Company A to*

access employee records of employees earning salaries below a threshold) [column 6, lines 29-39].

Claims 6 and 18: Wong et al. discloses a medium or signal and system of claims 5 and 17 and further discloses that:

a. the permission object identifies a second attribute group(*ie. plurality of policy groups and individual policies under each policy group*) having one or more attributes of the multiple attributes associated with the data object type(*ie. default policy groups 150, 160 and 170*) [figure 1];

b. a second permission attribute(*ie. particular job categories*) identifying one of the multiple attributes [column 6, lines 29-39];

c. and a second permission value(*ie. employee's job category on record*) for the second permission attribute, associates the second permission attribute and the second permission value with the second attribute group, and associates the permission attribute and permission value with the attribute group [column 6, lines 29-39];

d. and the one or more code segments are further configured to permit the user to access an attribute of the data object only when the attribute of the data object corresponds to an attribute of the second attribute group of the permission object and a value of an attribute of one of the multiple attributes associated with the data object is consistent with the second permission value of the second permission attribute (*ie. permit users in HR of Company B to access employee records of employees who belong to a particular job category*) [column 6, lines 29-39].

Claims 7 and 19: Wong et al. discloses a medium or signal and system of claims 1 and 13 and further discloses that the permission object identifies a permitted action(*ie. access rule of*

particular context attribute value allows users associated with company A to change policy group attributes), and the one or more code segments are further configured to permit the user to access the data object and perform an action on the data object when the action is consistent with the permitted action identified in the permission object(*ie. the function checks context value attributes that identify the user to determine whether the user is associate with company A, and whether the new value belongs to the particular set of values*) [column 7, lines 30-45].

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wong et al. (6,578,037) in view of Kraenzel (6,513,039).**

Claim 20: Wong et al. discloses a medium of claim 1 and further discloses that the permission object identifies a permitted action(*ie. access rule of particular context attribute value allows users associated with company A to change policy group attributes*), and the one or more code segments are further configured to permit the user to access the data object and perform an action on the data object when the action is consistent with the permitted action identified in the permission object(*ie. the function checks context value attributes that identify the user to determine whether the user is associate with company A, and whether the new value belongs to the particular set of values*) [column 7, lines 30-45], but does not explicitly disclose that the

actions are database operations wherein the database operations comprise of: create, read, update and delete.

However, Kraenzel discloses a similar invention and further discloses various database access operations such as read-only, edit or the like [column 1, lines 12-26].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the invention disclosed by Wong et al. with the additional features of Kraenzel, in order to prevent access to sensitive objects such as those containing confidential information, as suggested by Kraenzel.

Response to Arguments

7. Applicant's arguments filed February 20th, 2008 have been fully considered but they are not persuasive.

8. **Regarding Claims 1, 8 and 13:** The Applicant argues that the Wong et al. reference does not disclose a permission object having a permission attribute identifying one of the multiple attributes associated with the data object type, and a permission value for the permission attribute as required by the instant claims. Furthermore, the Applicant argues that the Wong et al. reference does not disclose using a permission object to determine whether a user is permitted to access a data object associated with a data object type, where the permission object identifies (1) a user affiliation to which the permission object applies, (2) a data object type to which the permission object applies such that the data object type is associated with multiple attributes and each data object having the data object type is associated with the multiple attributes, (3) a

permission attribute identifying one of the multiple attributes associated with the data object type, and (4) a permission value for the permission attribute, as recited by the instant claims.

However, the Examiner respectfully disagrees and submits that Wong et al. does in fact appear to disclose these features. The so called "set of rules" disclosed by Wong et al. are used to determine whether or not a user has access to a particular database object by analyzing a multitude of parameters such as but not limited to: a user's affiliated group, the particular database object or object type being accessed and even the particular attributes of the database object being accessed. Thus, based on what is claimed in the claim language, the Examiner respectfully submits that the "set of rules" disclosed by Wong et al. appear to be functionally equivalent to the claimed "permission object" which is also used to determine whether or not a user has access to a particular data object.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EDWARD ZEE whose telephone number is (571)270-1686. The examiner can normally be reached on Monday through Thursday 9:00AM-5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y. Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EZ
May 20, 2008
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